

In the Claims

1. (Currently Amended) A method of detecting or monitoring cancer comprising the step of detecting or monitoring elevated levels of (a) a nucleic acid molecule comprising a sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, and SEQ ID NO: 3 in a sample from a patient or (b) a protein or peptide comprising an amino acid sequence encoded by a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2 and SEQ ID NO: 3.
2. (Currently Amended) A method according to claim 1 ~~comprising using~~ wherein an isolated nucleic acid molecule comprising a sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2 and SEQ ID NO: 3 is used in the step of detecting or monitoring ~~to detect or monitor cancer~~.
3. (Currently Amended) A method according to claim 1 ~~comprising using~~ wherein a nucleic acid probe which is capable of hybridising under high stringency conditions to an isolated nucleic acid molecule comprising a sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2 and SEQ ID NO: 3 is used in the step of detecting or monitoring ~~to detect or monitor cancer~~.
4. (Currently Amended) A method of detecting or monitoring cancer according to claim 1 ~~comprising the use of~~ wherein a nucleic acid molecule or probe ~~according to claim 2~~ comprising a sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2 and SEQ ID NO: 3 is used in combination with a reverse transcription polymerase chain reaction (RT-PCR).
5. (Currently Amended) A method of detecting or monitoring cancer according to claim 1 wherein in the step of detecting or monitoring employs ~~comprising the use of~~ a nucleic acid molecule or probe ~~according to claim 3~~ which is capable of hybridising under high stringency conditions to an isolated nucleic acid molecule comprising a sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2 and SEQ ID NO: 3 in combination with a reverse transcription polymerase chain reaction (RT-PCR).

6. (Currently Amended) A method according to claim 1 comprising the use of an antibody selective for ~~a said protein or peptide as defined in claim 1~~ to detect the protein or peptide.
7. (Currently Amended) A method according to claim 6 ~~comprising the use of~~ wherein an Enzyme-linked Immunosorbant Assay (ELISA) is used to detect the protein or peptide
8. (Original) A method according to claim 1, wherein the cancer is a gastro- intestinal cancer.
9. (Currently Amended) A kit ~~for use with a method according to claim 1~~ comprising ~~a nucleic acid, protein or peptide, or an antibody as defined in claim~~
- (a) an isolated nucleic acid molecule comprising a sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2 and SEQ ID NO: 3;
 - (b) an antibody selective for a protein or peptide comprising an amino acid sequence encoded by a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, and SEQ ID NO: 3 as defined in claim 1 to detect the protein or peptide;
~~or (b) an isolated nucleic acid molecule comprising a sequence selected from SEQ ID NO: 1, SEQ ID NO: 2 and SEQ ID NO: 3 to detect the nucleic acid molecule,~~
- a nucleic acid probe which is capable of hybridising under high stringency conditions to an isolated nucleic acid molecule comprising a sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2 and SEQ ID NO: 3 ~~to detect the nucleic acid molecule~~
10. (Currently Amended) A method of prophylaxis or treatment of cancer comprising administering to a patient a pharmaceutically effective amount of
- (a) nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, ~~and~~ SEQ ID NO: 3, and ~~or a~~ pharmaceutically effective fragments thereof, ~~or~~
 - (b) a nucleic acid molecule hybridisable under high stringency conditions to a nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, ~~and~~ SEQ ID NO: 3, ~~or a~~ and pharmaceutically effective fragments thereof, ~~or~~
 - (c) a protein or peptide comprising an amino acid sequence encoded by a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, ~~and~~ SEQ ID NO: 3, and ~~or a~~ pharmaceutically effective fragments thereof, or

(d) of an antibody capable of specifically binding a protein or peptide comprising an amino acid sequence encoded by a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2 and SEQ ID NO: 3.

11. (Original) A method according to claim 10, wherein the cancer is a gastro-intestinal cancer.

12. (Currently Amended) A vaccine comprising

(a) a nucleic acid molecule having a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, ~~and~~ SEQ ID NO: 3, and ~~or a~~ pharmaceutically effective fragments thereof; and a pharmaceutically acceptable carrier, or

(b) a protein or peptide comprising an amino acid sequence encoded by a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, ~~and~~ SEQ ID NO: 3, and ~~or a~~ pharmaceutically effective fragments thereof; and a pharmaceutically acceptable carrier.

13. (Currently Amended) An isolated mammalian nucleic acid molecule which codes for the following amino acid sequence:

MSRVVPGQFDDADSSDSENRLKTVKEKDDILFEDLQDNVNENG
EGEIEDEEEEGYDDDDDDWDWDEGVGKLAKGYVWNGGSPQANRQTSDSSSAKMSTPA
DKVLRKFENKINLDKLNVTDSVINKVTEKSRQKEADMYRIKDKADRATVEQVLDPRTR
MILFKMLTRGIITEINGCISTGKEANVYHASTANGESRAIKIYKTSILVFKDRDKYVS
GEFRFRHGYCKGNPRKMVKTWAEKEMRNLIRLNTAEIPCPEPIMLRSHVLVMSFIGKD
DMPAPLLKNVQLSESKARELYLQVIQYMRRMYQDARLVHADLSEFNMLYHGGGVY110
VSQSVEHDHPHALEFLRKDCANVNDFMRHSVAVMTVRELFEFVTDPSITHENMDAYL
SKAMEIASQRTKEERSSQDHVDEEVFKRAYIPRTLNEVKNYERDMDIIMKLKEEDMAM
NAQQDNILYQTVTGLKKDLSGVQKVPALLENQVEERTCSDSEDIGSSECSDTDSE
DHARPKKHTTDPIDKKERKKMVKEAQREKRKNKIPKHVKKRKEKTAKTKKGK
or a variant ~~of~~ or a fragment thereof which encodes a prostate-associated antigen which is expressed in higher than normal concentrations in prostate cancer cells.

14. (Original) A vector comprising an isolated mammalian nucleic acid molecule according to claim 13.

15. (Original) A nucleic acid molecule comprising at least 15 nucleotides, the nucleic acid molecule being capable of hybridising to a molecule according to claim 13 under high stringency conditions.

16. (Original) An isolated protein or peptide comprising an amino acid sequence obtainable from a nucleic acid molecule according to claim 13.

17. (Original) An isolated protein or peptide comprising an amino acid sequence obtainable from a nucleic acid molecule according to claim 14.

18. (Original) An isolated protein or peptide comprising an amino acid sequence obtainable from a nucleic acid molecule according to claim 15.